

WHAT IS CLAIMED IS:

1. A method of draining a pseudo aneurysm sack and sealing an opening in the related blood vessel, said method comprising the steps of:

inserting a needle into a pseudo aneurysm sack;

advancing a guide wire through the needle;

advancing a catheter over the guide wire and into the pseudo aneurysm sack;

inflating one or more balloons to occlude a blood vessel puncture to inhibit fluid transfer between the blood vessel and the pseudo aneurysm sack;

aspirating fluids from the pseudo aneurysm sack; and

withdrawing the balloon, catheter, and guide wire.

2. The method of Claim 1, further comprising the step of advancing the guide wire into a blood vessel.

3. The method of Claim 1, further comprising the step advancing the catheter into a blood vessel.

4. The method of Claim 1, wherein said blood vessel is an artery.

5. The method of Claim 1, further comprising the step of injecting a coagulant to aid in clotting of a puncture in the blood vessel.

6. The method of Claim 1, wherein said one or more balloons comprises a balloon having a disk shape.

7. The method of Claim 1, wherein said one or more balloons comprises a balloon having a T shape.

8. The method of Claim 1, wherein said one or more balloons comprises a balloon having an hourglass shape.

9. The method of Claim 1, wherein said one or more balloons are inflated before the catheter is advanced through a puncture in the related blood vessel.

10. The method of Claim 1, wherein said one or more balloons are inflated after the catheter is advanced through a puncture in the related blood vessel.

11. A method of draining a pseudo aneurysm and sealing the related blood vessel, said method comprising the steps of:

inserting a needle into a pseudo aneurysm sack;

- advancing a guide wire through the needle;
- advancing a catheter over the guide wire;
- injecting one or more contrast media to aid in visualization of the pseudo aneurysm sack, the vessel, or a vessel puncture;
- aspirating the pseudo aneurysm sack; and
- withdrawing the catheter and guide wire.

12. The method of Claim 11, further comprising the step of injecting a coagulant to aid in clotting of a puncture in the blood vessel.
13. The method of Claim 11, wherein said blood vessel is an artery.
14. The method of Claim 11, wherein said catheter further comprises one or more shaft reinforcing components.
15. The method of Claim 14, wherein said shaft reinforcing component(s) extend along the entire length of the catheter.
16. The method of Claim 14, wherein said shaft reinforcing component(s) extend along less than the entire length of the catheter.
17. The method of Claim 14, wherein said shaft reinforcing components comprise a mandrel.
18. The method of Claim 14, wherein said shaft reinforcing components comprise a hypo tube.
19. The method of Claim 14, wherein said shaft reinforcing components comprise one or more wires.
20. The method of Claim 14, wherein said shaft reinforcing components comprise one or more tubing layers.
21. The method of Claim 14, wherein said catheter is reinforced by irradiation.
22. The method of Claim 14, wherein said shaft reinforcing components comprise a catheter wall having variable thickness.
23. The method of Claim 14, wherein said catheter comprises a distal section and a proximal section and wherein said distal section and said proximal section comprise different materials.

24. The method of Claim 23, wherein the material of said distal section is more atraumatic than the material of said proximal section.

25. The method of Claim 11, further comprising the step of injecting a material that is too viscous to seep through the vessel puncture.

26. The method of Claim 11, wherein the catheter shaft comprises a shaped profile that can provide varying resistance as it is inserted through a vessel puncture.

27. The method of Claim 26, wherein said shaped profile has an hour glass or peanut shape.

28. A method of draining a pseudo aneurysm and sealing the related blood vessel, said method comprising the steps of:

inserting a needle into a blood vessel;

advancing a guide wire through the needle;

inflating one or more balloons to occlude a blood vessel puncture to inhibit fluid transfer between the blood vessel and the pseudo aneurysm sack;

aspirating the pseudo aneurysm sack; and

withdrawing the balloon, catheter, and guide wire.

29. The method of Claim 28, further comprising the step of advancing the guide wire through the blood vessel into a pseudo aneurysm sack.

30. The method of Claim 28, further comprising the step of advancing a catheter over the guide wire and through the blood vessel into the pseudo aneurysm sack.

31. The method of Claim 28, wherein said blood vessel is an artery.

32. The method of Claim 28, further comprising the step of injecting a coagulant to aid in clotting of a puncture in the blood vessel.

33. The method of Claim 28, wherein said one or more balloons comprises a balloon having a disk shape.

34. The method of Claim 28, wherein said one or more balloons comprises a balloon having a T shape.

35. The method of Claim 28, wherein said one or more balloons comprises a balloon having an hourglass shape.

36. The method of Claim 28, wherein said one or more balloons are inflated before the catheter is advanced through a puncture in the related blood vessel.

37. The method of Claim 28, wherein said one or more balloons are inflated after the catheter is advanced through a puncture in the related blood vessel.

38. A method of draining a pseudo aneurysm and sealing the related blood vessel, said method comprising the steps of:

inserting a needle into a blood vessel;

advancing a guide wire through the needle;

injecting one or more contrast media to aid in visualization of the pseudo aneurysm sack, the vessel, or a vessel puncture;

aspirating the pseudo aneurysm sack; and

withdrawing the catheter and guide wire.

39. The method of Claim 38, wherein said blood vessel is an artery.

40. The method of Claim 38, further comprising the step of injecting a coagulant to aid in clotting of a puncture in the blood vessel.

41. The method of Claim 38, wherein said catheter further comprises one or more shaft reinforcing components.

42. The method of Claim 41, wherein said shaft reinforcing component(s) extend along the entire length of the catheter.

43. The method of Claim 41, wherein said shaft reinforcing component(s) extend along less than the entire length of the catheter.

44. The method of Claim 41, wherein said shaft reinforcing components comprise a mandrel.

45. The method of Claim 41, wherein said shaft reinforcing components comprise a hypo tube.

46. The method of Claim 41, wherein said shaft reinforcing components comprise one or more wires.

47. The method of Claim 41, wherein said shaft reinforcing components comprise one or more tubing layers.

48. The method of Claim 41, wherein said catheter is reinforced by irradiation.

49. The method of Claim 41, wherein said shaft reinforcing components comprise a catheter wall having variable thickness.

50. The method of Claim 41, wherein said catheter comprises a distal section and a proximal section and wherein said distal section and said proximal section comprise different materials.

51. The method of Claim 50, wherein the material of said distal section is moreatraumatic than the material of said proximal section.

52. The method of Claim 38, further comprising the step of injecting a material that is too viscous to seep through the vessel puncture.

53. The method of Claim 38, wherein the catheter shaft comprises a shaped profile that can provide varying resistance as it is inserted through a vessel puncture.

54. The method of Claim 53, wherein said shaped profile has an hour glass or peanut shape.

55. A device for draining and sealing a pseudo aneurysm comprising:
a multi-lumen catheter comprising at least one balloon inflation lumen and one fluid transfer lumen; and

one or more balloons attached to said catheter wherein said one or more balloons comprise a shaped profile that can provide varying resistance as it is inserted through a vessel puncture.

56. The device of Claim 55, wherein said one or more balloons comprises an hourglass or peanut shaped balloon.

57. The device of Claim 55, wherein said one or more balloons comprises two adjacent balloons.

58. A device for draining and sealing a pseudo aneurysm comprising:
a catheter comprising at least one fluid transfer lumen; and
a catheter shaft wherein said catheter shaft comprises a shaped profile that can provide varying resistance as it is inserted through a vessel puncture.

59. The device of Claim 58, wherein said catheter shaft has an hourglass or peanut shape.

60. The device of Claim 58, wherein said catheter further comprises a groove or slot for guiding the catheter along a guide wire.

61. The device of Claim 58, wherein said catheter further comprises a guide wire lumen.

62. A device for draining and sealing a pseudo aneurysm comprising:

 a catheter comprising at least one fluid transfer lumen wherein said fluid transfer lumen can be used for both withdrawal and infusion of fluids; and

 a groove or slot for guiding the catheter along a guide wire.

63. The catheter of Claim 60, further comprising a balloon inflation lumen and one or more balloons.

64. The catheter of Claim 61, wherein said one or more balloons comprises a "T" or disk shaped balloon.

65. The catheter of Claim 61, wherein said one or more balloons comprises a peanut or hourglass shaped balloon.

66. The catheter of Claim 61, wherein said one or more balloons comprises two adjacent balloons.